

Navy Case 84568

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REMARKS

Claims 1-20 are in the case as of the date of this amendment.
No claims have been allowed.

Claims 1-20 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-20 of co-pending Application No. 10/609,902.

Claims 1-20 are also provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of co-pending Application No. 10/609,901.

The Examiner has further indicated that a timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application.

The provisional rejections are respectfully traversed as Applicants have enclosed herewith a terminal disclaimer (i.e., "TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER A SECOND APPLICATION", PTO form PTO/SB/25), signed by an attorney of record, for each of co-pending Application Nos. 10/609,901 and 10/609,902. Payment of the appropriate fees required by 37 CFR 1.20(d) are also included herewith.

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In view of the foregoing and submissions made herewith, Applicants respectfully submit that all provisional rejections under the judicially created doctrine of obviousness-type double patenting are hereby overcome and are no longer applicable.

Claims 1-2, 7-13 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundstrom in view of Williams et al.

Claims 3-6 and 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lundstrom in view of Williams et al. as applied to claims 1 and 12 above, and further in view of Waldmann et al.

These rejections are respectfully traversed.

Lundstrom appears to teach a vehicle navigation system that detects the position of a vehicle 1 relative to a predetermined path 3 on a surface 2, and then calculates a vehicle correction to get vehicle 1 back onto path 3. A light source 4 mounted on vehicle 1 is detected by a sensing system (i.e., detector 5, sensing area 7 and lens system 8) that can determine the actual position of vehicle 1 on surface 2. The coordinates of the actual position are then compared with the coordinates of predetermined path 3 to develop a vehicle correction. This is made possible by the sensing system as (two-dimensional) sensing area 7 corresponds to (two-dimensional) surface 2. See column 4, lines 7-18 and lines 26-48. Multiple light sources can be provided on a vehicle

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when multiple vehicles are to be used. In such a scenario, each vehicle's light sources are operated in a specifically identifiable pattern to thereby provide unique vehicle identification. See column 3, lines 13-20.

Williams et al. appear to teach a self-contained light unit 2 for installation along an airstrip to indicate the location of the airstrip from a variety of altitudes above the ground. See page 5, paragraphs 88 and 90. A row of LEDs 8 is provided on each of the opposite sides of unit 2 with only one side being visible when the unit is approached by an aircraft. Each row is preferably a unique color so that only one color is visible when approaching the airstrip from one direction while the other color is visible only when approaching the airstrip from the opposite direction. See page 5, paragraph 95.

Waldmann appears to teach a polymer light guide 1 having internally-formed structures 2 (i.e., laser melted regions) that reflect light to the exterior of light guide 1. See column 2, lines 6-9 and lines 35-40.

In contrast, Applicants teach (e.g., in claim 1 although claim 12 has been amended in a similar fashion) a system that defines a line of approach. Light sources arranged in an array have means coupled thereto that define a primary field-of-view (FOV) from which all of the light sources are visible to a remotely-located viewer positioned in the primary FOV. However,

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less than all of the light sources are visible to the viewer when the viewer is positioned outside of the primary FOV. The light sources are divided into a plurality of sections with each section having a portion of the light sources associated therewith. A controller coupled to the light sources controls their operation in accordance with cyclical on/off sequences. Each cyclical on/off sequence is (i) associated with a corresponding one of the sections, (ii) identical for the portion of the light sources associated with the corresponding one of the sections, and (iii) unique for each section. As a result, a primary waveform of light energy is defined by the cyclical on/off sequences associated with the sections and is visible to the viewer from within the primary FOV. A plurality of secondary waveforms of light energy are defined by the cyclical on/off sequences with a unique one of the secondary waveforms being visible to the viewer based on the viewer's position outside of the primary FOV. Support for the amended claim language can be found in Applicants' originally-filed specification at page 6, line 1, to page 7, line 10.

None of the prior art cited by the Examiner appears to teach or even suggest the unique combination taught by Applicants. Lundstrom, Williams et al. and Waldmann do not teach or suggest, by themselves or in combination, an array of light sources divided into sections that are controlled such that each section produces a unique visible cyclical on/off sequence whereby the particular

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resulting waveform visible to a viewer is unique depending on the viewer's position.

Lundstrom's navigation system relies on a light source to define a position relative to a predetermined path. While Lundstrom does teach the use of multiple light sources, Lundstrom only uses the multiple light sources and an on/off sequence thereof to uniquely identify a vehicle as opposed to identifying a section of a light array as Applicants teach and claim. Thus, Lundstrom does not teach or suggest any means or reason to divide the multiple light sources into sections or a controller that operates each section in accordance with a unique cyclical on/off sequence as Applicants teach and claim. Furthermore, Lundstrom does not teach or suggest light sources arranged in concentric rings as Applicants teach and claim in independent claim 12. Thus, Lundstrom does not teach or suggest a system for defining a line of approach as Applicants teach and claim in independent claims 1 and 12.

Williams et al. teach two linear arrays of light sources on opposing sides of a lighting unit designed so that, at most, only half of the light sources could ever be visible to an approaching observer. See page 5, paragraph 95. Thus, Williams et al. teach away from Applicants' guidance transmitter in which a "primary FOV" is defined by the visibility of all light sources. Furthermore, while Williams et al. teach that a lighting unit can

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be flashed on and off (see paragraph 99), there is nothing in Williams et al. to teach or suggest a controller that controls a unique on/off sequence for each section of lights as Applicants teach and claim. Still further, Williams et al. does not teach or suggest light sources arranged in concentric rings as Applicants teach and claim in independent claim 12. Thus, Williams et al. does not teach (by itself) or suggest (in combination with Lundstrom) a system for defining a line of approach as Applicants teach and claim in independent claims 1 and 12.

Waldmann merely teach a polymer lighting element that can direct impinging (laser) light out therefrom in different directions. See column 2, lines 54-65. However, Waldmann does not teach or suggest a controller to control the operation of it's light sources as Applicants teach and claim. Thus, Waldmann does not teach or suggest any structure to overcome the above-described deficiencies of Lundstrom and Williams et al.

Accordingly, Applicants respectfully submit that claims 1-20 are patentable over Lundstrom in view of Williams et al., and patentable over Lundstrom in view of Williams et al. and further in view of Waldmann.

In view of all the art of record, the claims remaining in the case are considered to patentably distinguish thereover.

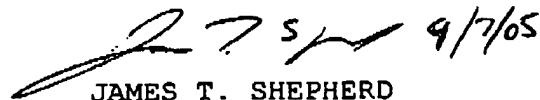
It is submitted in view of these remarks that all grounds for rejection have been removed by the foregoing amendment. For the

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hereinabove reasons, Applicants solicit an early and favorable response.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'J T Shepherd', followed by the date '9/7/05'.

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